



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/782,434 | 02/18/2004 | Kenichi Inoue | 7217/71727 | 6713 |

530 7590 04/11/2007
LERNER, DAVID, LITTENBERG,
KRUMHOLZ & MENTLIK
600 SOUTH AVENUE WEST
WESTFIELD, NJ 07090

EXAMINER

BANKHEAD, GENE LOUIS

ART UNIT PAPER NUMBER

3744

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 04/11/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/782,434

Applicant(s)

INOUE ET AL.

Examiner

Gene L. Bankhead

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/09/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 3 and 8 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-7 and 9-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 10/27/06, with respect to the rejection(s) of claim(s) 1-7 and 9 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Yanagisawa (US 2002/0126431).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Claims 1-2, 4, 6-7, 9, and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Yanagisawa (US 2002/0126431).

With regard to claims 1,4 and 11 Yanagisawa (US 2002/0126431) teaches a fan control apparatus (122 and 120) capable of cooling an inside of an equipment body.

Yanagisawa teaches a temperature detecting means (138 and 140) for detecting a temperature in a computer (paragraph 0052, lines 2-3), a temperature control means for controlling the cooling fan according to a temperature value detected by the temperature detecting means (paragraphs 0055).

Yanagisawa further teaches communication means for communicating with a server (18 and 20, paragraph 0037) connected to the equipment body by a network (24, paragraph 0038), and a time control means 112 for controlling the cooling fan according to a time value which corresponds to a timing of a communication operation performed

Art Unit: 3744

by the communication means (paragraphs 0055, 0087, 0099 and 0100). The cooling fan is operated according to whether or not the PCI clock is ON as well as the detected temperature (paragraph 0049, 0055 and Table 2).

In regard to claim 2, Yanagisawa teaches the communication means performs communication for a defined time duration (the duration of the clocks stopping) at predetermined times (when the clock changes from the operating state to the sleep state, paragraph 0069 and Table 2) and the time control means stops operation of the cooling fan until the defined time duration elapses (paragraph 0069 and 0070).

Regarding claims 6, 7, and 12 teach a fan control apparatus capable of performing the method as claimed; see the rejection of claims 1 and 2 as claims cite similar subject matter.

With regard to claim 9, Yanagisawa teaches a fan control apparatus capable of performing the method as claimed; see the rejection of claim 4 as claims cite similar subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagisawa (US 2002/0126431) in view of Frankel et al. (US 2003/0234625).

With regard to claim 5, Yanagisawa teaches all limitations of claim 1 yet fail to explicitly teach the cooling fan has a rotational frequency such that its rotational frequency rises in a ramp shape. Frankel et al. teach a cooling fan 100 with a speed sensor 116 that is capable of operating at constant speed (paragraph 0028). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yanagisawa with Frankel et al. to advantageously ensure power consumption levels remain constant with increases in voltage levels applied to the cooling fan without the cost and complexity of a voltage regulating power supply (paragraph 0028) in view of the teachings of Frankel et al. Furthermore a cooling fan whose rotational frequency increases at a constant velocity ensures there is no sudden increase or decrease in the speed of the fan and thus keeps the fan from being excessively noisy while in operation.

Regarding claim 10, Yanagisawa teaches a fan control apparatus capable of performing the method as claimed; see the rejection of claim 5 as claims cite similar subject matter.

Allowable Subject Matter

Claims 3 and 8 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gene L. Bankhead whose telephone number is (571)-272-8963. The examiner can normally be reached on 8:30-5:00.

Art Unit: 3744

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571)-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



CHERYL TYLER
SUPERVISORY PATENT EXAMINER

Examiner
Art Unit 3744
GB